

Applicant Name	Cut Bank, City of
Project Name	City of Cut Bank Water Improvements

Project Abstract

The water system serving Cut Bank dates back to approximately 1914 and consists of a water treatment plant, two 1 million-gallon storage tanks, and approximately 123,000 lineal feet of water main. Over 70% of the water mains are 65 years and older and most are undersized. The plant needs to add a backwash pump, flocculator, and sedimentation basin.

The source of water is Cut Bank Creek and it experiences the following deficiencies:

- Rapid changes in turbidity making treatment difficult;
- Very low streamflows that do not yield sufficient water to satisfy community needs so, the city is forced to place severe restrictions on water use and running out of water is possible;
- Existing off-stream storage may not have sufficient capacity to meet demands during low flow events of long duration; and
- Given the catastrophic nature of running out of water, the city believes it must immediately augment its existing raw water storage or find an alternate or back-up supply.

The distribution system experiences the following deficiencies:

- Much of this pipe is old and is four inches in diameter or smaller and corroded;
- Inadequate fire flow which represents a public safety concern;
- Leakage in the distribution system of 96 million gallons;
- High frequency of repair;
- Heavily corroded pipelines encourage the growth of bio-films which harbor bacteria and reduce chlorine residuals presenting a public health risk;
- Heavily corroded lines inhibit adequate pipeline flushing; and
- Low pressures result in backflow and associated contamination.

The proposed solution is to complete improvements in phases. Distribution and treatment improvements will be completed in subsequent phases.

For this grant application the following work will be completed:

- Expand existing off-stream raw water storage by adding a new pond adjacent to existing pond; and
- Add backwash pump.